

CLAIMS

What is claimed is:

1. A method of distributing a plurality of products from a cabinet having a door, the method comprising:

fitting each product with a radio frequency identification tag;

5 positioning the plurality of products in the cabinet;

sensing opening and closing of the cabinet door;

scanning the plurality of products in the cabinet upon sensing closing of the cabinet door to determine the number and type of products in the cabinet;

generating a message based on the number and type of products in the cabinet;

10 transmitting the message to a server; and

maintaining an inventory in the server based on the message.

2. A method as claimed in claim 1, further comprising:

reading a code on a user badge;

acknowledging having read the user badge;

15 determining the authenticity of the code read from the user badge; and

opening the cabinet if the code read from the user badge is authentic.

3. A method as claimed in claim 2, further comprising closing the cabinet after a predetermined amount of time.

4. A method as claimed in claim 2, wherein the step of determining authenticity 20 is done at the server.

5. A method as claimed in claim 1, wherein the inventory is maintained in the micro-warehouse controller.

6. A method as claimed in claim 2, further comprising actuating an output device if the code read from the user badge is authentic.

5 7. A method as claimed in claim 1, further comprising sensing the temperature of the cabinet and transmitting the temperature to the server.

8. A method as claimed in claim 7, further comprising denying access to the cabinet until the temperature reaches a predetermined level.

9. A method as claimed in claim 1, further comprising tracking the time each of 10 the plurality of products spends in the cabinet.

10. A method as claimed in claim 9, further comprising comparing the time each of the plurality of products spends in the cabinet to a shelf life for each of the plurality of products.

11. A method as claimed in claim 10, further comprising generating a pick list of 15 products for each product that has spent a time in the cabinet that is greater than the shelf life of that product.

12. A method as claimed in claim 1, further comprising scanning the products in the cabinets and determining whether any of the products have a recall status.

13. A method as claimed in claim 1, wherein the message contains information 20 regarding the status of individual products.

14. A method as claimed in claim 13, wherein the status of individual products includes product's type, temperature history, and time spent in the micro-warehouse.

15. A method as claimed in claim 2, wherein the server uses a self-updating boot up procedure, the procedure comprising:

receiving a message containing a most recent software version number;

5 comparing a software version number currently used to the most recent software version number;

downloading the most recent software version if versions differ when compared;

writing the downloaded software to memory; and

booting the downloaded software.

10 16. A method as claimed in claim 15, further comprising:

requesting an updated user list; and

receiving the updated user list.

17. A method as claimed in claim 16, wherein the inventory change is calculated in the micro-warehouse controller and a message generated containing this change is sent to the server.

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18. A method as claimed in claim 1, wherein the inventory is calculated based on a first message generated from a scanning of the plurality of products made prior to sensing opening of the cabinet door and a second message generated from a scanning of the plurality of products made after sensing closing of the cabinet door.

19. A system for distributing a plurality of products, each product having a radio frequency tag, the system comprising:

a radio frequency user badge having a code;

at least one micro-warehouse, the micro-warehouse having

5 an output device,

a door with a proximity sensor,

an antenna mounted on the micro-warehouse, and

10 a controller coupled to the proximity sensor and the antenna, the controller operable to read the code, to activate the output device after reading the code on the user badge, to scan the plurality of products and determine the identity of each of the products, and to create a message including the identity of each of the products; and

a server coupled to the controller to receive the message.

20. A system as claimed in claim 19, further comprising a temperature sensor
15 mounted in the micro-warehouse and coupled to the controller.

21. A system as claimed in claim 19, wherein the system includes a plurality of micro-warehouses and the server includes a micro-warehouse database.

22. A system as claimed in claim 19, wherein the server includes a registration module.

20 23. A system as claimed in claim 19, wherein the server includes an order history module.

24. A system as claimed in claim 19, wherein the server includes an account management module.

25. A system as claimed in claim 19, wherein the server includes a stock request module.

26. A system as claimed in claim 19, wherein the controller uses a self-updating boot up procedure, the procedure comprising:

5 receiving a message from the server containing software version number;
comparing software version number currently used to the most recent software version number;

downloading the most recent software version if versions differ when compared;

10 writing downloaded software to memory; and
booting the downloaded software.

27. A method as claimed in claim 26, further comprising:
requesting an updated user list; and
receiving updated user list.

28. A method of ordering a plurality of products from a defined area without requiring manual input to a computer, the method comprising:

fitting each product with an identification tag;

positioning the plurality of products in the defined area;

5 scanning the plurality of products in the defined area to determine the number and type of products in the defined area;

generating a message based on the number and type of products in the defined area;

transmitting the message to a server; and

10 maintaining an inventory in the server based on the message.

29. A method as claimed in claim 28, further comprising:

reading a code on a user badge,

acknowledging having read the user badge;

determining the authenticity of the code read from the user badge; and

15 providing access to the defined area if the code read from the user badge is authentic.

30. A method as claimed in claim 29, providing access to the defined area includes providing access for a predetermined amount of time.

31. A method as claimed in claim 29, wherein the step of determining authenticity
20 is done at the server.

32. A method as claimed in claim 30, further comprising actuating an output device if the code read from the user badge is authentic.

33. A method as claimed in claim 28, wherein the inventory is calculated based on a first message generated from a first scanning of the plurality of products and a second message generated from a second scanning of the plurality of products.